



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,031	12/10/2003	Yuki Sasaki	118048	5154

7590 09/15/2006

OLIFF & BERRIDGE  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER

ROGERS, JAMES WILLIAM

ART UNIT	PAPER NUMBER
----------	--------------

1618

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/731,031	<b>Applicant(s)</b> SASAKI ET AL.	
	<b>Examiner</b> James W. Rogers, Ph.D.	<b>Art Unit</b> 1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

The amendment filed 08/18/2006 has been entered.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-14 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Sasaki et al. (US 2003/0044370), for the reasons set forth in the office action mailed 04/18/2006.

Applicant's arguments filed 08/18/2006 have been fully considered but they are not persuasive.

Applicant asserts that Sasaki does not teach resin particles or methods of producing resin particles, subjected to a reshaping treatment and that the Sasaki

Art Unit: 1618

application would not meet the limitation that the particles are satisfactory with the equation in claim 1,  $0.5 < b/a < 1$  and  $0.4 < c/b < 0.8$ .

The relevance of these assertions is unclear. Firstly in claims 1-14 and 18-20 applicant does not claim a step of subjecting the particles to a reshaping treatment; therefore the Sasaki patent does not have to disclose this feature. The Sasaki application teaches that particles with an SF1 of less than 110 are spherical with good spreadability but have inefficient affinity to skin, and particles with an SF1 above 140 have unevenness on the surface of the resin, which improves skin adhesion, but spreadability becomes insufficient. See [0027] and [0028]. Thus it is inherent that the patent teaches the same dimensions as those claimed by the applicant since the surface area claimed is the same and the application teaches a non-spherical particle in which the dimensions of a,b,c in applicants application can fall within the range of the claimed SF1 values and volume of the particle in 2003/0044.

Claims 1-14 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Sasaki et al. (US 6,893,649), for the reasons set forth in the office action mailed 04/18/2006.

Applicant asserts that Sasaki does not teach resin particles or methods of producing resin particles, subjected to a reshaping treatment and that the Sasaki patent would not meet the limitation that the particles are satisfactory with the equation in claim 1,  $0.5 < b/a < 1$  and  $0.4 < c/b < 0.8$ .

The relevance of these assertions is unclear. Firstly in claims 1-14 and 18 applicant does not claim a step of subjecting the particles to a reshaping treatment;

Art Unit: 1618

therefore the Sasaki patent does not have to disclose this feature. The Sasaki patent teaches that particles with an SF1 of less than 110 are spherical with good spreadability but inefficient affinity to skin, and particles with an SF1 above 140 have unevenness on the surface of the resin, which improves skin adhesion, but spreadability becomes insufficient. See col 4 lin 65-col 5 lin 13. Thus it is inherent that the patent teaches the same dimensions as those claimed by the applicant since the surface area claimed is the same and the patent teaches a non-spherical particle in which the dimensions of a,b,c in applicants application can fall within the range of the claimed SF1 values and volume of the particle in 6,893,649.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 2003/0044370) in view of Kinsho et al. (US 7,005,480), this new rejection was necessitated by amendment.

Sasaki discloses a resin powder (including co-styrene-acrylate polymer) for dermatological compositions (including antiperspirants) and methods to make the composition (including emulsion polymerization). See [001], [002], [0039], [0052]-[0055]. Regarding claims 1,15, 18-20, the phrase "wherein the particles have a degree of hydrophobicity of from 10% to 60 %" it is obvious that since the particles are composed of the same polymers they will have the same hydrophobicity. Regarding claims 1,5,15,18-20, the equation limitation is met by the Sasaki patent since it is obvious that the dimensions of a, b and c for the particles disclosed in Sasaki are in the range of applicants currently claimed invention since it discloses the same composition and polymer resin (including the same MW) with the same SF1 values, the same particle average volume and the same surfaceness index. See abstr, [0021] lin 1-4, [0025],[0031],[0038]. Besides the above the Sasaki application discloses that particles with an SF1 of less than 110 are spherical with good spreadability but have inefficient affinity to skin, and particles with an SF1 above 140 have unevenness on the surface of the resin, which improves skin adhesion, but spreadability becomes insufficient, therefore it is obvious that someone skilled in the art would experiment with different dimensions of the particle in order to have the best combination of spreadability and affinity to the skin. See [0027] and [0028]. Thus it is obvious that Sasaki discloses the same dimensions as those claimed by the applicant since the surface area claimed is

Art Unit: 1618

the same and the application teaches a non-spherical particle in which the dimensions of a,b,c in applicants application can fall within the range of the claimed SF1 values and volume of the particle in the patent. Regarding claims 8-9 Sasaki discloses the Tg temperature within the range specified by applicants, See [0040] lin 1-2. Regarding claim 14, Sasaki discloses that fine particles can be adhered to the surface of the particles, See [0056] lin 1-2. Regarding claim 19, Sasaki discloses that the resin powder can take the form of an emulsion. See [0050].

Sasaki does not disclose reshaping the particles by treatment.

Kinsho discloses a resin dispersion having uniform particle diameters that can be processed by emulsion polymerization and dispensed by a Nanomizer (discussed in specification of applicant as a general method to achieve collisions against a uniform plane under high pressure). See col 1 lin 7-9, col 12 lin 35-39 and col 19 lin 64-65. Dispensed by a Nanomizer is then considered to meet the limitation of a reshaping treatment for the particles in claim 15. There was no patentable weight given by the examiner to the intended use of the resin powder as a cosmetic. The degree of hydrophobicity limitation is met since the Kinsho patent discusses the use of many different types of polymers including several that fall within the scope of applicants claimed resins (including hydroxyl vinyl monomers, nitrile containing monomers, vinyl ketones, ect).

It would have been obvious to a person of ordinary skill in the art at the time the claimed invention was made to combine the art described in the documents above because Sasaki discloses all of applicants claimed invention except for the step of

Art Unit: 1618

subjecting the particles to a reshaping treatment while Kinso discloses that resin particles reshaped by instruments such as Nanomizers was already well known in the art at the time of the invention. The motivation to combine the above documents would be a resin powder shaped by a reshaping technique in order to form a desirable particle dimension that would have improved skin adhesion and spreadability. Thus, the claimed invention, taken as a whole was *prima facie* obvious over the combined teachings of the prior art.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinsho et al. (US 7,005,480), for the reasons set forth in the office action mailed 04/18/2006.

Applicant's arguments filed 08/18/2006 have been fully considered but they are not persuasive.

Applicant asserts that Kinsho does not teach resin particles or methods of producing resin particles, subjected to a reshaping treatment and does not include any motivation or suggestion to reshape its resin particles. Also applicants state that the Kinsho patent would not meet the limitation that the particles are satisfactory with the equation in claim 1,  $0.5 < b/a < 1$  and  $0.4 < c/b < 0.8$ .

The relevance of these assertions is not clear. Clearly Kinso disclosed that the resins were dispensed by a Nanomizer (discussed in specification of applicant as a general method to achieve collisions against a uniform plane under high pressure), dispensed by a Nanomizer is then considered to meet the limitation of a reshaping treatment for the particles in claim 15. The dimensions of the resin limitation are also



Art Unit: 1618

met since it would be the ordinary practice of the skilled artisan to establish the desired dimensions of the particles through experimentation. “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages.”); *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 1618

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1-16 and 18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3,7-9,15-16 of U.S. Patent No. 6,893,649.

Claims 1-16 and 18-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2,5 and 7 of copending Application No. US 2003/0044370.

Applicant's arguments filed 08/18/2006 have been fully considered but they are not persuasive.

Applicant asserts that neither of the Sasaki applications above would meet the limitation that the particles are satisfactory with the equation in claim 1,  $0.5 < b/a < 1$  and  $0.4 < c/b < 0.8$ .

The relevance of these assertions is unclear. Clearly, it is inherent that the applications teach the same dimensions as those claimed by the applicant since the surface area claimed is the same and the application teaches a non-spherical particle in

Art Unit: 1618

which the dimensions of a,b,c in applicants application can fall within the range of the claimed SF1 values and volume of the particle.

### ***Conclusion***

No claims are allowed at this time.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

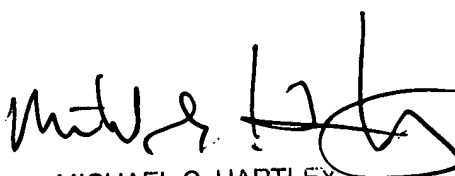
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Rogers whose telephone number is (572) 272-7838. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on (572) 271-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 1618

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MICHAEL G. HARTLEY  
SUPERVISORY PATENT EXAMINER